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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/748,754	12/26/2000	Andrew P. Kramer	279.166US1	4508
21186 759	90 08/27/2003			
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			EXAMINER	
			OROPEZA, FRANCES P	
			ART UNIT	PAPER NUMBER
			3762	

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

			\wedge K				
•		Application No.	Applicant(s)				
2	_	09/748,754	KRAMER ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Frances P. Oropeza	3762				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHC THE N - Extens after S - If the p - If NO - Failure - Any re	DRTENED STATUTORY PERIOD FO MAILING DATE OF THIS COMMUNIC sions of time may be available under the provisions of sions of time may be available under the provisions of this communication of the provisions of the period for reply specified above is less than thirty (30)	CATION. of 37 CFR 1.136(a). In no event, however, may inication. of days, a reply within the statutory minimum of the utory period will apply and will expire SIX (6) Modified by the statute, cause the application to become	a reply be timely filed hirty (30) days will be considered timely. ONTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).				
1)⊠	Responsive to communication(s) file	ed on <u>6/18/03 (Amendment)</u> .					
2a) <u></u> □	This action is FINAL .	b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims							
4) 🖂	Claim(s) <u>1-24</u> is/are pending in the a	pplication.					
	a) Of the above claim(s) is/ar	e withdrawn from consideration.					
5)	Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-24</u> is/are rejected.							
7) 🗌	7) Claim(s) is/are objected to.						
8)□	Claim(s) are subject to restrict	tion and/or election requirement.					
Application Papers							
9)☐ The specification is objected to by the Examiner.							
10)□ T	he drawing(s) filed on is/are:						
	Applicant may not request that any obje						
11) 🗌 🏻	The proposed drawing correction filed		J disapproved by the Examiner.				
If approved, corrected drawings are required in reply to this Office action.							
,—	The oath or declaration is objected to	by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)[☐ All b)☐ Some * c)☐ None of:		•				
		documents have been received.					
	·	documents have been received in					
Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (Pination Disclosure Statement(s) (PTO-1449) Pa	TO-948) 5) Notice	ew Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152)				

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DETAILED ACTION

Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. The Applicant's submission filed on 6/16/03 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Thompson et al. (US 5902324).

Thompson et al. disclose a multi-chamber cardiac pacing system for providing synchronous pacing to at least the two upper heart chambers or the two lower heart chambers or to three or to all four heart chambers. Multiple embodiments are disclosed including a symmetric and an asymmetric single chamber embodiment (col. 7 @ 55-67), dual chamber embodiment (col. 13 @ 53-59), bi-atrial and bi-ventricular, upper and lower chamber pacing system embodiment (col. 8 @ 1-6), and right / left pacing embodiment (c 8, ll 28-31). Multiple leads and multiple electrode configurations can be employed (col. 13 @ 11-19). The invention



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operates in demand and triggered pacing modes to treat bradycardia (col. 9 @ 35-52). Offset synchronized pacing is effected by optimally timed cardiac pacing pulses to each chamber as necessary accounting for the implantation site of the electrode (col. 11 @ 3-7 and 33-44). A blank signal read as a specified delay renders the amplifier inoperable prior to the protection period (col. 14 @ 15-35).

As to synchronized mode and rate chamber control, Thompson et al. disclose synchronized heart chamber pacing (col. 7 @ 16-21; col. 24 @ 8-15) where, in the asymmetric mode, the rate chamber controls the timing of the pacing escape interval (col. 7 @ 60-67).

As to expiration of an escape interval and pacing, based upon the rate chamber events and upon expiration of an escape interval, the synchronized chamber is paced unless the pace is inhibited by a "CDW INHIBIT signal". A "CDW INHIBIT signal" is generated when a conducted depolarization is detected in the synchronized chamber "during as a particular CDW time/period. A synchronized chamber conduction delay window (CDW), read as the synchronized chamber protection period, is begun in response to a paced or sensed event in the rate chamber (col. 7 @ 8-13; col. 8 @ 1-15; col.15 @ 14-46). When a depolarization is sensed in the synchronization chamber, the synchronized chamber pace is inhibited (col. 8 @ 11-15), the CDW timer is halted by the CDW inhibit signal, and the escape interval of claim 1 and 11, which is associated with the rate chamber (col. 15 @ 32-34), continues to run irregardless of the sensed and paced events in the synchronization chamber (col. 12 @ 6-28).

As to a stimulation pace to the rate chamber, no stimulation pace is delivered to the rate chamber (col. 8 @ 21-23; col. 16 @ 39-44).

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As to resetting the escape interval and no pace to the synchronized chamber during a cardiac cycle in which a rate sense occurs, the escape interval is reset by a rate chamber sense such that no pace is delivered to the synchronized chamber during a cardiac cycle in which the rate sense occurs (col. 8 @ 11-15; col. 12 @ 6-12 and 54-60).

4. Claims 21-24 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Vock (US 6188926). Vock discloses a single and dual chamber (atrial and ventricular) pacemaker with back-up pacing based on exertion level to provide constant rate pacing unless pacing is inhibited during a protection period initiated by a sense in the chamber (abstract; col. 2 @ 60-62; col. 3 @ 7-12; col. 4 @ 13-14 and 57-60).

Statutory Basis

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Fran Oropeza whose telephone number is (703) 605-4355. The Examiner can normally be reached on Monday – Thursday from 6 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Angela D. Sykes can be reached on (703) 308-5181. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 306-4520 for regular communication and (703) 306-4520 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Frances P. Oropeza Patent Examiner Art Unit 3762

> JEFFREY R. JASTRZAE PRIMARY EXAMINER

> > 4705/03